intelligent
lighting controls

WIRELESS WIDEVIEW & HALLWAY OCCUPANCY SENSOR

BATTERY POWERED

FEATURES

- **Pairs in Seconds with Wireless Controllers**
- **Passive Infrared (PIR) Detection**
- **Wide View or Hallway (Long Range) Coverage Pattern Options**
- **10 Year Battery Life Design**
- **Compact Size and Matte Finish**
- **Five Contractor Friendly Mounting Methods**
- **Mounting Nipple Attachment with Integrated Hole Saw**
- **Convenient Test Mode**

OVERVIEW

The **Intelligent Lighting Controls** wireless wide view and hallway occupancy sensors are a simple, yet reliable battery powered control solution. Preferred by contractors for their flexible mounting methods, **ILC** wireless sensors greatly reduce total installation time and wireless pairing fuss. Requiring just a few seconds per device, **ILC** wireless sensors can be linked to one or more wireless load controllers (such as the **ILC-SWX-851** wireless wall switch, or a **ILC-SWX-950** series wireless power pack). Additionally, these sensors can be configured to work in applications with other wireless or wired ceiling, corner, or hallway sensors
to provide extended coverage in large or irregularly shaped spaces. As with all **ILC** products, the latest passive infrared technology and digital signal processing techniques are used to provide unmatched occupant detection performance and energy savings.

SPECIFICATIONS

ELECTRICAL & WIRELESS

BATTERY TYPE
Requires one CR123(A) Lithium Battery

BATTERY LIFE
Designed for 10 Year Life
　(under default settings)
Non-Volatile Memory (saves all
　settings regardless of battery state)
Blink Warning @10% Life

RANGE
80' line of site w/o obstruction (walls)
40' with obstruction (walls/floors)

FREQUENCY
915 MHz ISM Band

WIRELESS LINKING
Simple 3 sec. Push Button Process

SECURITY
All Wireless Data is Encrypted

ENVIRONMENTAL

OPERATING TEMP
32°F to 122°F (0°C to 50°C)

RELATIVE HUMIDITY
0-95% Non-Condensing,
　Indoor Use Only

CODE COMPLIANCE

These sensors can be used to meet ASHRAE 90.1, IECC, & Title 24 energy code requirements.

PHYSICAL

SIZE
2.875" H x 2.75" W x 3.25"D
(7.30 x 6.98 x 8.25 cm)

WEIGHT
4.75 oz.

COLOR
White

LED INDICATION
Motion Detection (when in Test Mode)
Wireless Linking (Pairing)

OPERATION

OPERATING MODES
Occupancy & Vacancy Modes -
　Configured on Linked Controller

COMPATIBLE LOAD CONTROLLERS
ILC-SWX-851 Wall Switch
ILC-SWX-950 Series Power Packs

WIRELESS TEST MODE
　Button Toggles On/Off
　　Wirelessly Linked Loads

COVERAGE TEST MODE
White LED Illuminates Upon Detected
　Occupancy

TIME DELAY OPTIONS
Configured at Load Controller(s)
1, 5, 10, 15, 20, 30 min.

BASIC OPERATION

Sensors detect movement in the infrared energy that radiates from occupants as they move within the device's field-of-view. Once occupancy is detected, the sensor immediately signals a wirelessly linked load controller (e.g. power pack) to switch on or dim up the connected lighting. At regular intervals, the sensor will retransmit its latest occupancy status such that the load controller can keep lights on for occupants during brief periods of inactivity, while returning the space to an energy saving lights off (or dim) state once no longer occupied.

MADE IN THE USA

TAA COMPLIANT

BAA COMPLIANT

TITLE 20 LISTED

TITLE 24 COMPLIANT

RoHS COMPLIANT · LEAD FREE

COVERAGE PATTERN

PASSIVE INFRARED (PIR)

WIDE VIEW 120°
- Small motion (e.g., hand movements) detection up to 40 ft (12.19 m)
- Large motion (e.g., walking) detection up to 70 ft (21.34 m)
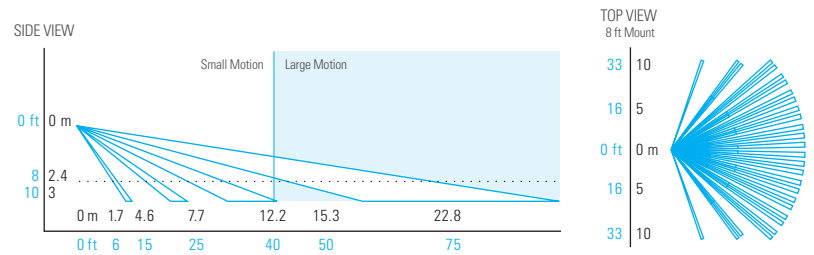- Designed for 8 to 12 ft (2.44 to 3.66 m) high mounting

SIDE VIEW

Small Motion Large Motion

TOP VIEW
8 ft Mount

Diagram reflects sensor in first position. Adjust angle downward if mounting above 10 feet or to decrease gap directly under sensor.

HALLWAY (LONG RANGE)
- Designed for 8 to 12 ft (2.44 to 3.66 m) high mounting
- Large motion (e.g., walking) detection up to 100 ft (30.48 m)
- Detection occurs sooner when crossing coverage beams upon entry to a hallway as opposed to entering from the end and walking directly at the sensor

SIDE VIEW

TOP VIEW
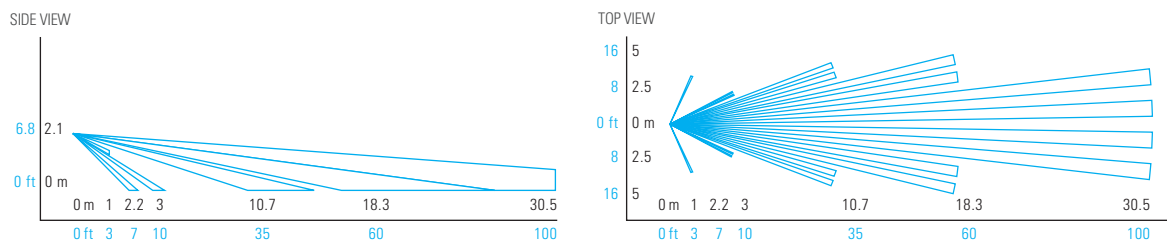
APPLICATIONS

A single wireless wide view sensor provides an excellect soltion for a medium sized space like a conference room or small classroom. However, multiple wireless sensors can be easily linked to the same load controller(s) to provide coverage for larger spaces like an open office or large classroom. The wireless hallway sensor provides excellent coverage of hallways from one or both ends. Additionally, when linked to wireless wall switch load controllers (**ILC-SWX-851**) or to wireless power packs (**ILC-SWX-950** Series) and remote wireless wall stations, these sensors can be used to meet ASHRAE 90.1, IECC, & Title 24 energy code requirements that require vacancy operation.

- Classrooms
- Open Offices
- Conference Rooms
- Hallways
- Break Rooms

COMPATIBLE WIRELESS DEVICES

The below chart lists the devices that can be used in a **Intelligent Lighting Controls** wireless application. Note that sensors and remote switch & dimmer devices are transmit only devices and therefore must be linked to a load controller for switching or dimming of lighting.

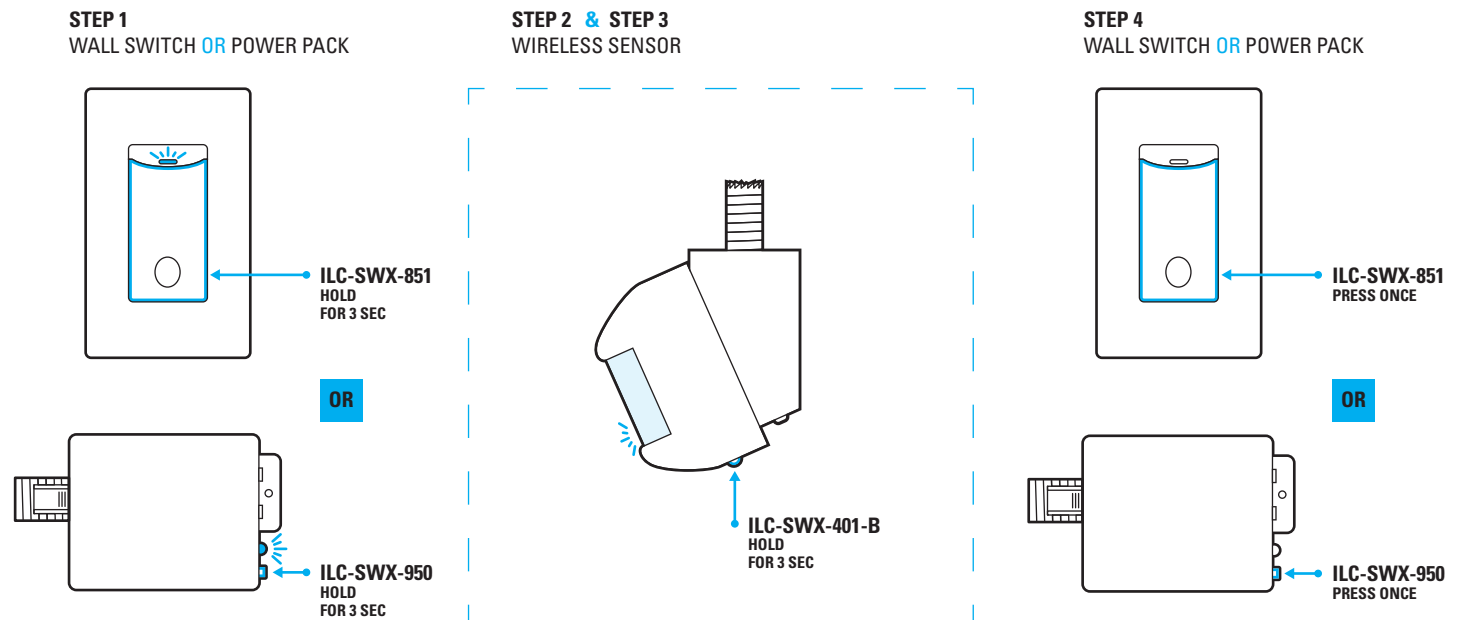| MODEL #	DESCRIPTION	WIRELESS TYPE	POWER TYPE
ILC-SWX-201-B	Small Motion 360° Sensor, PIR	Transmit	Battery
ILC-SWX-401-B	Wide View Sensor, PIR	Transmit	Battery
ILC-SWX-402-B	Long Range Hallway Sensor, PIR	Transmit	Battery
ILC-SWX-851-xx	Wall Switch Load Controller, No Neutral Required, <xx = color>	Transmit & Receive	120-277 VAC
ILC-SWX-852-B-xx	Remote Switch (On/Off), <xx = color>	Transmit	Battery
ILC-SWX-854-B-xx	Remote Dimming Switch (On/Off, Raise/Lower), <xx = color>	Transmit	Battery
ILC-SWX-950	Power Pack Load Controller, 20A	Receive	120/277 VAC
ILC-SWX-950-D2	Power Pack Load Controller, 20A, 0-10V Dimming	Receive	120/277 VAC
ILC-SWX-950-AX	Hybrid Wireless/Wired Power Pack Load Controller, 20A	Transmit & Receive	120/277 VAC
ILC-SWX-950-AX-D2	Hybrid Wireless/Wired Power Pack Load Controller, 20A, 0-10V Dimming	Transmit & Receive	120/277 VAC

ORDERING INFO

MODEL NUMBER	DESCRIPTION
ILC-SWX-401-B	Wireless Wide View Sensor, PIR, 120°, Battery Powered
ILC-SWX-402-B	Wireless Hallway Sensor, PIR, Battery Powered

WIRELESS LINKING (PAIRING)

Linking a sensor with a wall switch controller or power pack is quickly done via the following procedure:

1. Enter pairing mode by holding down the wall switch controller's (or power pack's) button for 3 seconds until the LED starts alternating white then blue, then release.
2. At the sensor, hold down the programming button for 3 seconds until the LED starts alternating white then blue. Releasing will link the sensor with any device in pairing mode (see note 1 below). The lights will toggle once as confirmation.
3. Repeat step 2 to link another sensor or device.
4. When all devices have been liked, close pairing mode on the wall switch controller (or power pack) by pressing the button 1 time. Pairing will also be automatically closed after 15 minutes of no new devices being linked.

Note 1: When in pairing mode, the alternating LED colors on the wall switch controller (or power pack) will periodically pause and blink out the total number of linked devices. There will be no blinks during the pause until the first device is linked.

STEP 1
WALL SWITCH OR POWER PACK

STEP 2 & STEP 3
WIRELESS SENSOR

STEP 4
WALL SWITCH OR POWER PACK

ILC-SWX-851
HOLD FOR 3 SEC

OR

ILC-SWX-950
HOLD FOR 3 SEC

ILC-SWX-401-B
HOLD FOR 3 SEC

ILC-SWX-851
PRESS ONCE
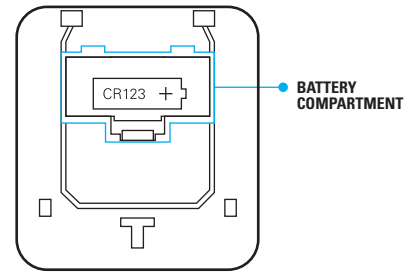
OR

ILC-SWX-950
PRESS ONCE

OPERATION NOTES

- By default, every ~60 seconds the sensor transmits whether or not occupancy was detected during the previous period.
- Referred to as the sensor's "heartbeat", this period can be reduced to ~30 seconds although this will decrease expected battery life.
- If a sensor transmitted "unoccupied" at its last heartbeat, any new occupancy detection event will be transmitted immediately.
- If a sensor transmitted "occupied" at its last heartbeat, new occupancy events will only be transmitted at the heartbeat interval, thus conserving battery life.
- The wirelessly linked wall switch load controller and/or power pack maintains a master time delay that is reset every time a linked sensor reports occupancy. Lights will be switched off once all linked sensors have continously reported unoccupied for the duration of the time delay.
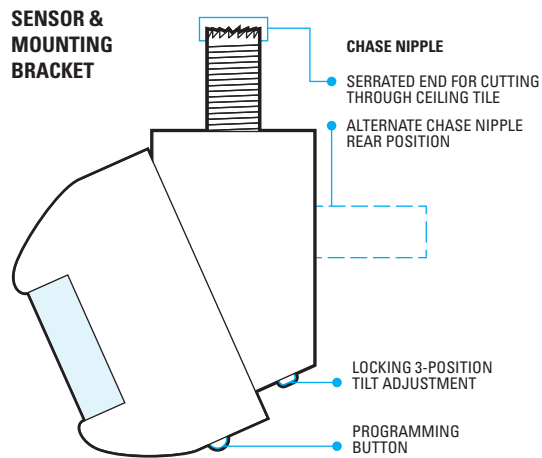
BATTERY INFORMATION

- The sensor runs on one CR123(A) Lithium Battery (included).
- Install battery prior to mounting sensor. Polarity is indicated on the battery compartment door.
- If the sensor's battery life reaches 10%, all wirelessly linked load controllers will blink lights on/off/on upon initial occupancy as a replacement warning.
- Replacement batteries are available at most retailers or home centers where batteries are sold or from **ILC**
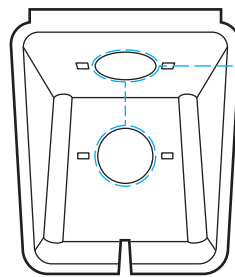
CR123 +

BATTERY COMPARTMENT

INSTALLATION OPTIONS

SENSOR & MOUNTING BRACKET

CHASE NIPPLE

SERRATED END FOR CUTTING THROUGH CEILING TILE

ALTERNATE CHASE NIPPLE REAR POSITION

LOCKING 3-POSITION TILT ADJUSTMENT

PROGRAMMING BUTTON

MOUNTING WITH CHASE NIPPLE
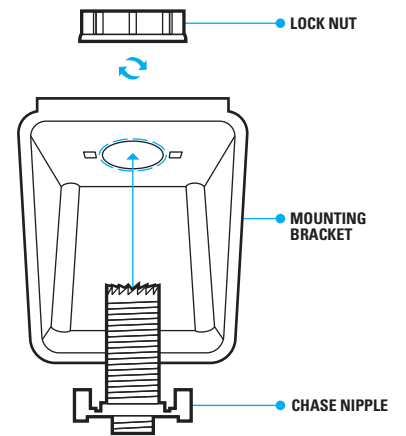RECOMMENDED

TWO 1/2" TRADE SIZE KNOCKOUTS FOR USE WITH CHASE NIPPLE OR DIRECT CONDUIT CONNECTION
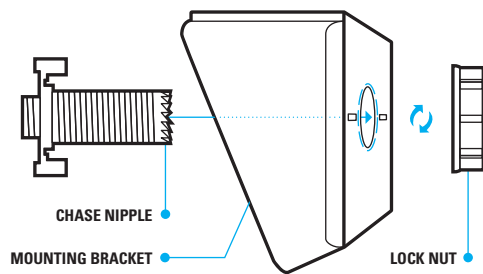
CHASE NIPPLE & LOCK NUT INCLUDED FOR MOUNTING TO CEILING TILE OR 1/2" KNOCKOUT IN JUNCTION BOX

TOP INSTALLATION

LOCK NUT

MOUNTING BRACKET

CHASE NIPPLE

REAR INSTALLATION

CHASE NIPPLE

MOUNTING BRACKET

LOCK NUT

ADDITIONAL MOUNTING METHODS

CHANNELS FOR SLIDING OVER MOUNTING SCREWS

SCREW HOLES FOR MOUNTING TO FLAT WALL

SCREW HOLES FOR MOUNTING IN CORNER
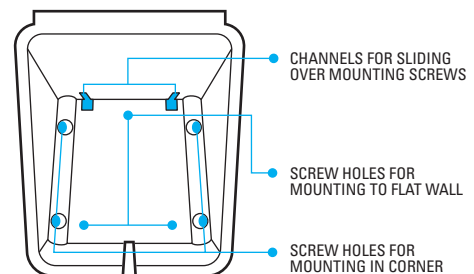
FCC INFORMATION (FCC ID: 2AVRY-SWX0002)

This device complies with Part 15 of the FCC Rules. Operation is subject to the following conditions:
1. This device many not cause harmful interference, and
2. This device must accept any interference received, Including interference that may cause undesired operation
Changes and Modifications not expressly approved by BLP Technologies can void your authority to operate this equipment under Federal Communications Commission's rules.

INDUSTRY CANADA INFORMATION (IC: 26012-SWX0002)

This device complies with Industry Canada license-exempt RSS standard(s). Operation is subject to the following two conditions: (1) this device may not cause interference, and (2) this device must accept any interference, including interference that may cause undesired operation of the device.
Le présent appareil est conforme aux CNR d'Industrie Canada applicables aux appareils radio exempts de licence. L'exploitation est autorisée aux deux conditions suivantes : (1) l'appareil ne doit pas produire de brouillage, et (2) l'utilisateur de l'appareil doit accepter tout brouillage radioélectrique subi, même si le brouillage est susceptible d'en compromettre le fonctionnement.